3. Stipe pallid; pileus 3-4 cm.; odor none. P. Leaianus (Berk.) Sacc. Stipe brown-fibrillose; pileus 5-8 cm.; odor of decayed cheese.

P. mucidolens(Berk. *).

- 4. Pileus with no greenish or olivaceous tints.5.Pileus olivaceous or greenish-brown.6.
- Pileus grayish-brown; stipe pure white.
 Pileus yellow-brown or pink-brown; stipe yellow.
 P. alcuriatus gracilis Peck
 P. expansus (Peck) Peck
- 6. Pileus 3-4 cm., uniformly pale olivaceous-brown. P. expansus terrestris Peck.
 Pileus 1-2 cm., olivaceous, umbo chestnut, becoming metallic green in dried specimens. P. callistus (Peck) Peck

NEW YORK BOTANICAL GARDEN.

REVIEWS

Flora of the Southeastern United States †

In the presentation of this mammoth contribution to the literature of southern botany, Dr. Small has rendered science an invaluable service and the student of the flora a much needed and most welcome publication. For more than four decades the field has been covered and studied mainly through the medium of Dr. Chapman's most admirable Flora of the Southern United States, but in recent years, to keep pace with the great activity in taxonomic botany, the many changes which have been suggested in generic limitations and particularly the changes incident to the adoption of the newer classification, sytematic arrangement and nomenclature, it has been necessary to consult the files of numerous periodicals and books, the extent of which is seldom found outside of the largest libraries. It is to those who have labored under such difficulties that this volume of nearly fourteen hundred pages will most strongly appeal. The extension of the range in the present work, which includes also the region lying between the Mississippi River and the one hundredth meridian south of the northern boundaries of Arkansas, Indian Territory and Oklahoma, will add commensurately to its value.

* Agaricus (Galera) mucidolens Berk. Lond. Jour. 4: 301. 1845.

† Small, J. K. Flora of the Southeastern UnitedStates. Large Svo. Pp. i-xii, **+ 1370. 22 Jl. 1903.** Published by the author, Bedford Park, New York City. Price \$3.60. In a brief preface the author states the object of the Flora the presentation of "descriptions of the seed-plants, ferns and fern-allies growing naturally within the southeastern United States as limited by the northern boundaries of North Carolina, Tennessee, Arkansas, Indian Territory and Oklahoma, and the one hundredth meridian, together with the known geographical distribution of each species." Following the preface is a table of contents, and on the remaining pages designated by Roman numerals appears an admirable key to the orders.

The sequence of the plant-groups follows mainly, but not always, the arrangement adopted by Engler and Prantl in their Natürlichen Pflanzenfamilien, the most noteworthy exceptions being found in the positions assigned to the orders Santalales and Aristolochiales, which are placed many steps higher up in the systematic arrangement.

The nomenclature is in accordance with the Rochester and Madison code, the principles of which are now so well established, and besides, English or vernacular names have been associated with the more widely known species. The chief characters of the subkingdoms with their classes and subsequent families and genera appear in their positions throughout the text, and lucid analytical keys have been prefixed to their descriptions and to those of the species.

Turning over the neatly printed pages, the reviewer is impressed by the excellence of the typography and the ease with which the eye can differentiate and find the subject matter. The specific descriptions are terse and diagnostic, and the use of the metric system adds greatly to the precision. Frequent acknowledgments of contributions, revisions or assistance from specialists appear among the pages, showing that about twenty-five persons have so aided in the work, while the number of contributed manuscripts is as many as twenty-eight. The present tendency to separate natural groups of plants into distinct genera is strongly illustrated in the present work, some striking examples being found in the treatment of the families Oxalidaceae, Euphorbiaceae, Spondiaceae and the tribe Galegeae of Fabaceae. This practice has the peculiar advantage of diminishing the size of often cumbersome groups, thereby facilitating their study and arrangement. At intervals throughout the work forty-seven new genera are described, while the original descriptions of new species aggregate more than three hundred. Pages 1321-1325 are devoted to an appendix, and contain a number of descriptions of plants discovered within the range during the several years the book was in press, together with a few corrections. The remaining pages are devoted to a list of the genera and species published in the volume, a tabulated list of the orders and families and a copious index.

By the advent of this book, which so completely sets forth the most recent botanical knowledge of an area of almost 650,000 square miles, the cause of southern botany has received an impulse that has long been needed.

C. D. BEADLE.

NEWS ITEMS

Dr. D. T. MacDougal returned on July 29 from a month's visit to the island of Jamaica.

W. H. Pearson, Esq., of Park Crescent, Victoria Park, Manchester, England, desires to find a purchaser for set No. 4 of Spruce's "Hepaticae Amazonicae et Andinae."

Dr. J. N. Rose, assistant curator, Division of Plants, of the U. S. National Museum, is having a botanical outing in Mexico. He was expecting to reach the City of Mexico about August 20.

Miss Anna Murray Vail, librarian of the New York Botanical Garden, returned on August 4 after a three months' absence in Europe, bringing with her five or six hundred volumes for the library of the Garden.

Mr. J. A. Shafer, custodian of the herbarium of the Carnegie Museum, Pittsburg, spent the last two or three weeks of July at the New York Botanical Garden, engaged in studying the collections recently made by him in Cuba.

Mr. George V. Nash, head gardener of the New York Botanical Garden, sailed for Haiti on July 25 with the intent of spending several weeks in making botanical collections there. He is